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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,069	11/21/2003	Brian Wehrung		2247

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EXAMINER

SHAPIRO, JEFFERY A

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/719,069

Applicant(s)

WEHRUNG ET AL.

Examiner

Jeffrey A. Shapiro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 19-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/21/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-18, drawn to a hierarchical control system for a material transport system, classified in class 700, subclass 230.
 - II. Claims 19-29, drawn to a method for distributing and routing material, classified in class 705, subclass 8. The inventions are distinct, each from the other because of the following reasons:
2. Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are different because the subject matter of Invention I is directed towards a hierarchical control system that controls a material transport system, while Invention II subject matter is directed towards a scheme for routing material.
3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Attorney Scott Sanford on 2/21/05 a provisional election was made without traverse to prosecute the invention of group I, Claims 1-18. Affirmation of this election must be made by applicant in replying to this

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Office action. Claim 19-29 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al (US 6,185,474 B1) in view of Soraoka et al (US 6,526,330 B2).

Nakamura discloses a distributed control system (see figure 1) having a host computer (30) corresponding to Applicant's higher level controller, said host computer including an exposure information management program (33), which manages jobs and communicates information in response to queries from exposure units concerning work information. See col. 5, lines 28-60. A semiconductor exposure unit (10) has an exposure work information management program (13) and an equipment control program (12) which corresponds to Applicant's lower level controller. Note that the exposure unit (10) may be construed as a "neighborhood." The local goals are construed to be formulated by the exposure management program (33) with input from elements (13, 14 and 34).

Nakamura does not expressly disclose, but Soraoka discloses the details of a

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wafer transfer/transport apparatus (202, 204, 208, 9, 10 and 92. See col. 5, lines 52-61, col. 7, lines 34-57 and col. 8, lines 12-21 of Soraoka. Note that zones can be construed to be the track or rail portion near an exposure unit (10) of Nakamura or one of the bays (2) of Soraoka.

Both Nakamura and Soraoka are considered to be analogous art because they both concern semiconductor wafer manufacture.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have used the wafer transport system of Soraoka in the wafer manufacturing system of Nakamura.

The suggestion/motivation would have been provided by Soraoka, for example, at abstract, lines 4-7 and col. col. 5, lines 52-61, col. 7, lines 34-57 and col. 8, lines 12-21, which describe use of a transport system for wafers in such a wafer manufacturing system as Nakamura. Additionally, one ordinarily skilled in the art would have recognized a need to transport wafers between processing stations.

Note also that whether or not the manufacturing product is a semiconductor wafer, pharmaceutical or magnetic storage disk, the system of Nakamura will still work and function as Applicant's claimed system.

Regarding routing, note that Nakamura's exposure work information management program performs optimal routing based on various factors. This program has to route the wafers to the correct exposure unit so as to have a particular batch of wafers processed.

Regarding regulation of the speeds of the various transport devices, not that the robots and transfer means of Saraoka must run by motors, which must speed up and slow down to a stop in front of a particular processing station in order to transfer wafers to a wafer robot at that processing station.

Regarding the destination announce message, note that Nakamura's figures 2 and 3, which describes a query as to whether or not the necessary work information has been received, of which destination information and status can be construed to be such information that one ordinarily skilled in the art would need to use in Nakamura's system in order for it to work properly.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey A. Shapiro whose telephone number is (703)308-3423. The examiner can normally be reached on Monday-Friday, 9:00 AM-5:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald P. Walsh can be reached on (703)306-4173. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffrey A. Shapiro
Examiner
Art Unit 3653

February 21, 2005



DONALD P. WALSH
SUPERVISORY PATENT EXAMINER
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